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ABSTRACT

During the 1987-88 school year, the Second Generation Power of Positive Students (POPS) Multimedia Program was piloted in the West Virginia public schools, grades kindergarten through four. The program consists of eight videocassettes. Six of the eight were filmed in six West Virginia public schools using actual principals, teachers, and students. The program emphasizes self-awareness, goals and expectations, enthusiasm and coping skills and is divided into four modules, each focusing on major components of self-esteem. The research design for the program evaluation involved 24 experimental schools and 24 control schools. Affective and cognitive assessment instruments were developed and administered as pretests and postests to both the experimental and control groups. In addition, feedback was obtained from teachers and principals via surveys. This report describes the evaluation of the program, explains the evaluation activities and conclusions, and also makes recommendations for future development of the program. The measuring instruments and surveys used in the evaluation are appended. A 21-item bibliography is included. (JD)

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Evaluation of Pilot Program

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POPS
Power of Positive Students

Instructional Program

West Virginia Department of Education

SP 031 589

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Power of Positive Students (POPS)

Instructional Program:

Evaluation of Pilot Program

January to May 1988

by

Research and Information Services

West Virginia Department of Education

Charleston, West Virginia 25305

August 1989

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Executive Summary

For sixteen (16) weeks from January to May 1988, the Second Generation Power of Positive Students (POPS) Multimedia Program was piloted in grades K-4 in public schools in West Virginia. An evaluation of the pilot program was conducted by the West Virginia Department of Education.

The research design involved 24 experimental schools and 24 control schools. An affective and a cognitive assessment instruments were developed by the state department and administered as pretests and posttests to both the experimental and control groups. In addition, feedback was obtained from teachers and principals via surveys.

A comparison of the pretest and posttest results indicated that the first grade experimental group scored significantly higher on the affective instrument than did the first grade control group. The greatest increase occurred on the items related to the school/academic variable. No significant difference was found between the experimental and control second, third, and fourth grades on the affective instrument. The kindergarten pretest scores were so high that too little room was available for growth as measured by the posttest; a ceiling effect had occurred.

The second grade experimental group scored significantly higher than the second grade control group on the cognitive instrument. The greatest improvement occurred on the items related to awareness of own feelings or the

self-esteem variable. The kindergarten, first, third and fourth grade experimental and control groups did not score significantly differently.

Ninety-six (96) percent of the principals who responded to a survey indicated that the POPS program was a positive addition to their curriculum. Ninety-three (93) percent responded that they would recommend the program to other schools.

Only 16 percent of the respondents to the teacher survey felt that they had been involved in the implementation of the program in their schools. Eighty-five (85) percent reported that attitudes had been positively affected.

CHAPTER 1

Introduction

During the 1987-88 school year, the Second Generation Power of Positive Students (POPS) Multimedia Program was piloted in West Virginia public schools, grades kindergarten through four, and in forty-nine other elementary schools across the country (one in each state). In West Virginia the program was piloted for sixteen (16) weeks from January 1988 to May 1988.

The purpose of this paper is to present the findings from the pilot project of the Second Generation POPS program in the state of West Virginia. This paper reviews related research, presents the methods and procedures of the pilot study, analyzes the pilot study results, and provides a discussion of the findings, their limitations and recommendations for future research.

Operational Definition of POPS

In the 1950's, Dr. Norman Vincent Peale wrote the book The Power of Positive Thinking, which espoused the author's philosophy regarding positive attitudes. This philosophy has been implemented by businessmen to motivate people and in some instances has been very successful.

Dr. William Mitchell applied Peale's philosophies of confidence, self-worth and positive thinking to help him succeed in his own life. While superintendent of schools in Allegheny County, Maryland, Mitchell co-authored the book Power of Positive Students with Dr. Charles P. Conn. The book is based on a program implemented by Dr. Mitchell while he was superintendent in

Sumter County Schools, South Carolina. By 1987 the program had been used in over 5,000 schools nationwide.

Mitchell's goal was to help students and teachers believe in themselves. He claimed that "studies show self-worth in children drops dramatically as children move through school and contend[ed that] the teacher is the most important person in a child's life from ages six to 12." (McGregor, 1986)

> The time has come in America for parents and educators to do something about the low self-esteem that lies in the heart of such dismal educational outlook. To teach children the enormous power of their own attitudes should be the highest goal of education. They will not learn how great is their potential unless we teach them. (Mitchell, 1985)

Second Generation POPS Program

The Second Generation POPS program evolved from the merging of the major concepts from Dr. Peale's and Dr. Mitchell's books. It consists of eight (8) videocassettes. Six (6) of the eight (8) videocassettes were filmed in six (6) West Virginia public schools using actual principals, teachers, and students. The program emphasizes self-awareness, goals and expectations, enthusiasm and coping skills and is divided into four (4) modules. Each module contains two (2) student videocassettes, each of which focuses on major components of self-esteem, two (2) audiocassettes for teachers, a Teacher's Video Guide, Teacher's Own instructional delivery suggestions, and a Parent Planner.

The following are the module titles:

> Module One - Self-Awareness: One videocassette titled "Awareness of Feelings" and another on Awareness of Choice.
>
> Module Two - Goals and Expectations: One videocassette titled "Overcoming Negative Conditions" and another titled "Developing Realistic Expectations."

Module Three - Enthusiasm and Coping Skills: One videocassette titled "Achieving Success" and another titled "When Things Really Go Wrong."

Module Four - Making A Difference: One videocassette titled "Risking to Help Others" and another titled "The Individual's Role in the Community."

Pilot Study in West Virginia Public Schools

While attending a conference for chief school officers in 1987, former West Virginia State Superintendent of Schools, Dr. Tom McNeel, learned of the Power of Positive Students Program. After making inquiries concerning the availability of Dr. Mitchell's POPS program, Dr. McNeel found that a revised version of POPS was being created by Positive Communications, Inc. (PCI). Working with PCI representatives, a plan was formulated to develop and pilot the Second Generation POPS program on a statewide basis in West Virginia.

The short term goal of PCI was to pilot the program in West Virginia for sixteen (16) weeks. PCI's long term goal was that the program would become part of the developmental guidance program in schools nationwide. Therefore, the first set of four (4) modules for grades kindergarten through 4 would be building blocks to which new modules would be added to follow these students as they matriculate through school.

A steering committee was created to oversee the planning and logistics of the pilot project. The committee began working with PCI in May 1987 on plans to implement the Second Generation POPS program. Approximately $65,000 of necessary funds were to be solicited from business and industry in West Virginia for purchasing required materials to implement the program in West Virginia public schools. An additional million dollars in support for the project was to be solicited by PCI to develop the program modules. Educational agencies in West Virginia were not to bear any costs related to implementing the program in the participating schools. Participation in the program was to be voluntary.

The Second Generation POPS Program was initiated with a statewide orientation meeting held at the State Capitol in Charleston, West Virginia, on October 5, 1987. The orientation meeting was attended by Governor Arch A. Moore, Jr., Dr. Norman Vincent Peale, Dr. William Mitchell, State Superintendent of Schools Dr. Tom McNeel, PCI representatives, professional educators from around the state, and the media.

POPS Leadership Training

On December 15 and 16, 1987, POPS Leadership Training sessions were held in Beckley, West Virginia, and Morgantown, West Virginia. These sessions trained county representatives (counselors, teachers, principals and county office personnel) who would function as school facilitators in the implementation process. These representatives previewed audiocassettes, videocassettes, and written materials and discussed strategies for implementing the POPS program in grades K-4.

The training sessions involved representatives from Positive Communications, Inc., subcommittees of educators from the state and the POPS steering committee. Training session components consisted of 1) an orientation to the key learning outcomes delivered through the POPS materials and the program's objectives and rationale, 2) a demonstration of how classroom teachers could effectively implement the POPS materials, and 3) an overview of how the POPS program would be evaluated. Subsequent to the leadership training sessions, the facilitators trained teachers in their counties on how to implement the POPS materials.

CHAPTER 2

Research Review

This section has been excerpted from a June 1987 literature review by Drs. Frank B. Brouillet, Charles R. Marshall and Theodore E. Andrews, of the Office of the Superintendent of Public Instruction in Olympia, Washington. The literature review provides definitions of affective education, a summary of research findings and conclusions drawn from the major research findings.

Definitions of Affective Education

> There is not one conclusive definition of affective education. The term affective education is defined differently according to various studies which have been conducted. Anderson (1981) points out the abstractness of the term and identifies a common thread that runs through all the definitions.
>
> 'Few, if any, human reactions fall completely into one of these categories (cognitive, affective, psychomotor). It is important that the affective domain be understood as a construct, not a real thing, and that labeling of certain reactions as affective...is to point out aspects of these reactions which have significant emotional or feeling components.' (Anderson, 1981)

Summary of Research Findings and Conclusions

The following is a synopsis of major research findings in affective education and is also excerpted from the Brouillet et al literature review.

Lowes Elementary Students' Self-Perception of Ability and Perceptions of Peers' Ability

> Stipek and Weisz (1981) examined the accuracy of K-3 students' perceptions of their own relative ability. They found that:

a. Students at the extreme ends of the performance continuum have begun to incorporate a performance feedback into their self-perceptions as early as the second grade.

b. Kindergarteners and first graders have a self-enhancement bias (they think higher of their own ability than do their teachers or peers) and a greater bias toward positive perceptions of their own ability than older students do.

c. Children in early elementary grades may misinterpret information about poor work habits as a negative reflection of their ability.

Factors Affecting Student Self-Perceptions and Self-Concepts

Silvernail's (1985) review of research on student self-concept provided the following:

a. Students' perceptions of their teachers' feelings toward them are highly correlated with their own self-perceptions.

b. Students who feel they are liked and respected by their teachers have higher self-concepts while those who believe they are disliked by their teachers are more dissatisfied with themselves.

c. Some evidence suggests that student self-perceptions may be a reflection of teachers' self-perceptions. For instance, researchers report that changes in student self-esteem correspond to changes in teachers' self-esteem.

d. Teacher expectations are related to student self-concept; however, the evidence indicating this is far from conclusive.

e. Additional time will need to pass before we can determine the impact of mainstreaming on student self-concept.

f. In general, student self-concept becomes more negative through the schooling years.

g. Teachers' self-image, their interactions with students, and their teaching styles all relate to student self-concept.

CHAPTER 3

Methods and Procedures

The following text presents information on the research design, sample, data collection instruments and procedures, and data analyses procedures.

Research Design

The research design was an experimental-control group pretest-posttest design for both the affective and cognitive instruments. The design is as follows:

	PRETEST			POSTTEST
EXPERIMENTAL	R	O_1	X	O_2
CONTROL	R	O_1		O_2

R - Random Selection
O - Observation
X - Treatment

Sampling Procedure

Schools were the sample unit. There are approximately 800 schools in West Virginia that have kindergarten through fourth grade, and 392 of those schools volunteered to implement the POPS pilot program. The size of the sample (48) was derived by taking six (6) percent (one percent above the minimum required sample size according to a sample chart) of the 800 elementary schools.

Approximately 50 percent of the sampled schools implemented the POPS program (experimental group) and 50 percent did not implement the program (control group). That is, 24 schools were sampled from the 392 schools which

volunteered to implement the POPS program; they became the experimental group. Twenty-four (24) schools were sampled from the non-volunteers; they became the control group.

All students in grades kindergarten through fourth grade in each experimental school were included in the study. This ensured data would be derived at classroom and student levels. A 95 percent confidence level at plus or minus seven (7) percent reliability was used at the classroom level and a 95 percent confidence level at plus or minus two (2) percent reliability was used at the student level.

Experimental and control schools were matched on achievement and socio-economic status (SES). Achievement was operationally defined as the composite third grade percentile score for each school on the most recent administration of the Comprehensive Test of Basic Skills (CTBS), Form U, a standardized norm-referenced achievement test used in the state-county testing program. Socio-economic status (SES) was operationally defined as the percent of students receiving free or reduced price meals under the Federal Child Nutrition Program. Research indicates that these two variables affect student performance.

The variables were then divided into a four-by-four matrix consisting of 16 cells. Each cell represents a range of percents:

		CTBS			
		0-25	26-50	51-75	76-100
SES	76-100	1	2	3	4
	51-75	5	6	7	8
	26-50	9	10	11	12
	0-25	13	14	15	16

The schools' CTBS scores and SES percents were entered into a database on a computer, which was then queried to place the schools into the cells as defined above. The cells were divided again into a two-by-two matrix consisting of four (4) strata. Stratum-1 represents high SES and low achievement, stratum-2 represents low SES and high achievement, stratum-3 represents low SES and low achievement, and stratum-4 represents high SES and high achievement. After the number of schools in each of the four (4) strata was totaled, the proportion of school membership in each stratum was used to determine the sample size for each stratum. After each school had been given a unique number, random sampling was employed to select schools from each stratum. The following table shows the percent sampled in each stratum by experimental and control group:

Stratum	Number of Schools	Percent	Sample Size Experimental Group	Sample Size Control Group
1	81	13.5	3	3
2	193	32.2	8	8
3	37	6.1	1	1
4	289	48.2	12	12
Total	799	100.0	24	24

The number of students selected was over 8,000, approximately 4,000 in the experimental and 4,000 in the control.

Methods Used in Obtaining Participation

West Virginia Department of Education staff from the Office of School Improvement and from Research and Information Services made personal contacts with county superintendents to obtain permission to involve the schools selected in the study. During this contact, the superintendents were

notified of which schools had been selected for the experimental group to implement the POPS program and for the control group.

Data Collection Instruments

The POPS Evaluation sub-committee of the steering committee and staff from Research and Information Services (RIS) of the West Virginia Department of Education developed four (4) instruments to evaluate the POPS pilot program. The Student Assessment Survey (cognitive instrument) and the Survey on Self-Esteem for Children (K-4) (affective instrument) were used to evaluate changes in student knowledge and attitudes. When the program was completed, two (2) additional survey instruments, one for principals and one for teachers, were administered to determine how well the program had been received in their schools.

The goals and objectives of the POPS pilot program were provided to the evaluation sub-committee by PCI. The sub-committee and RIS staff then developed a cognitive instrument by formulating questions to address each objective. The cognitive instrument consisted of 27 questions and an answer sheet with three (3) responses: "Yes," "No," and "I don't know." The instrument addressed eight (8) variables (also the goals of the POPS program): Awareness of Own Feelings, Awareness of Choice, Overcoming Perceived Expectations, Developing Realistic Goals, Utilizing Strengths, Dealing With Changes, Risking To Help Others, and School/Community.

The affective instrument was developed based on research literature for grades K-4. The literature was salient in six (6) areas: school, academic, social, recreation, family and environment. The instrument consisted of 18 questions in the six areas and two (2) answer sheets with three (3) or five (5) responses representing feelings from happy to sad. One of the two answer sheets, a three-face answer sheet, was for kindergarteners and first graders; a five-face answer sheet was developed for second, third and fourth graders.

The instrument was piloted in Kanawha County and fieldtested at Anna Jarvis Elementary School in Taylor County Schools (West Virginia). It was modified based on fieldtest results. A factor analysis was conducted on the sample data and four (4) dimensions were found: 1) school/academic, 2) individual, 3) social and 4) recreation. These dimensions were consistent between the fieldtest and the pretest-posttest results.

After the pilot study was completed, the POPS Principal Survey and POPS Teacher Survey were sent to all principals and teachers in the 392 schools which implemented the POPS program. The Principal Survey consisted of 24 questions which addressed the impact the POPS program had on each school. The Teacher Survey consisted of 25 questions which measured teacher attitude toward the POPS program.

Copies of the instruments, answer sheets and instructions for all four (4) instruments are in Appendixes A through D.

Data Collection Procedures

The first phase of the data collection process was to evaluate student change using the cognitive and affective instruments administered prior and subsequent to implementation of the POPS program. The 48 schools which had been randomly selected were pretested before the POPS program began and posttested after the POPS program was completed.

On January 14, 1988, county test administrators from all over the state met in Charleston, West Virginia, for a one-day training workshop on how to administer the cognitive and affective instruments. The test materials were disseminated to the test administrators. The objectives of the project and procedures were discussed and minor changes were made to the test materials. Major points emphasized were that: 1) tests were to be administered by the people trained in the workshop, 2) questions on both instruments were to be

read aloud in all grades, 3) affective instrument had two (2) answer sheets - one for the kindergarteners and first graders and one for the second, third, and fourth graders, and 4) the pretest was to be administered between January 25 to February 5, 1988, and the posttest was to be administered between May 16 to May 27, 1988. Copies of the instruments are in Appendixes A and B.

The test administrators were instructed to administer the instrument to all kindergarten through fourth grade (K-4) students in only the schools which had been selected in their county. The completed answer sheets were to be sent to Research and Information Services (RIS) at the West Virginia Department of Education.

The final phase of the process was to evaluate how principals and teachers responded to the POPS program. In May 1988, a Principal Survey was sent to all principals and a Teacher Survey was sent to all teachers in the experimental schools. The completed surveys were then sent to RIS in the West Virginia Department of Education.

Teacher and parent evaluations were included in each of the modules. These were sent to Positive Communications, Inc. and are not included in this evaluation.

Preparation of Data for Analysis

All cognitive and affective instrument answer sheets were returned to the West Virginia Department of Education to be scored. The cognitive instrument answer sheets were scored by giving three (3) points for each question that had a response of "Yes" and one (1) point to a response of "No" or "I don't know." The student's score represented the total number of points accumulated on the instrument.

The affective instrument answer sheets were separated into two (2) groups. The first group was kindergarten and first grade, to which a three-face answer sheet had been given. This group was based on a five-point (5) system from positive to negative. Five (5) points were given if the student placed an "X" on the happy face. Three points (3) were given if the student placed an "X" on the face with no expression and one (1) point was given if the student placed an "X" on the face with the sad face. The second group consisted of second, third and fourth graders, to which a five-face answer sheet had been given. A point score range of five (5), four (4), three (3), two (2), and one (1) was used; five (5) represented the most positive response. The student's score was the total number of points accumulated on the instrument. The scores of students who took both the pretest and posttest were matched.

The Principal Surveys were analyzed by the Office of School Improvement, whereas the Teacher Surveys were analyzed by RIS staff.

Unit of Analysis

The sampling design permitted the school, class and student to be the unit of analysis. Because the POPS program was administered in a class setting, the classroom was used as the unit of analysis.

The differences between the experimental and control group classrooms by grade were based on losses or gains for each group between the pretest and the posttest. The scores from which losses or gains were discerned were based on samples of kindergarten through fourth grades, as described earlier in the text.

Null Hypotheses

Statistical control was carefully exercised in order to generalize from the samples to the larger population for each of the grade levels - kindergarten through fourth - in West Virginia. The null hypothesis permits a statement to be made about a population using sample data recognizing some degree of uncertainty. Below is a list of all the null hypotheses for the affective and cognitive instruments.

Affective Null Hypothesis - Overall

H_o: There is no difference between kindergarten experimental and kindergarten control groups.

H_o: There is no difference between first grade experimental and first grade control groups.

H_o: There is no difference between second grade experimental and second grade control groups.

H_o: There is no difference between third grade experimental and third grade control groups.

H_o: There is no difference between fourth grade experimental and fourth grade control groups.

Affective Null Hypothesis - School/Academic

H_o: There is no difference between kindergarten experimental and kindergarten control groups on school/academic.

H_o: There is no difference between first grade experimental and first grade control groups on school/academic.

H_o: There is no difference between second grade experimental and second grade control groups on school/academic.

H_o: There is no difference between third grade experimental and third grade control groups on school/academic.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on school/academic.

Affective Null Hypothesis - Individual

H_o: There is no difference between kindergarten experimental and kindergarten control groups on individual.

H_o: There is no difference between first grade experimental and first grade control groups on individual.

H_o: There is no difference between second grade experimental and second grade control groups on individual.

H_o: There is no difference between third grade experimental and third grade control groups on individual.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on individual.

Affective Null Hypothesis - Social

H_o: There is no difference between kindergarten experimental and kindergarten control groups on social.

H_o: There is no difference between first grade experimental and first grade control groups on social.

H_o: There is no difference between second grade experimental and second grade control groups on social.

H_o: There is no difference between third grade experimental and third grade control groups on social.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on social.

Affective Null Hypothesis - Recreation

H_o: There is no difference between kindergarten experimental and kindergarten control groups on recreation.

H_o: There is no difference between first grade experimental and first grade control groups on recreation.

H_o: There is no difference between second grade experimental and second grade control groups on recreation.

H_o: There is no difference between third grade experimental and third grade control groups on recreation.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on recreation.

Cognitive Null Hypotheses - Overall

H_o: There is no difference between kindergarten experimental and kindergarten control groups.

H_o: There is no difference between first grade experimental and first grade control groups.

H_o: There is no difference between second grade experimental and second grade control groups.

H_o: There is no difference between third grade experimental and third grade control groups.

H_o: There is no difference between fourth grade experimental and fourth grade control groups.

Cognitive Null Hypothesis - Awareness of Own Feelings

H_o: There is no difference between kindergarten experimental and kindergarten control groups on awareness of own feelings.

H_o: There is no difference between first grade experimental and first grade control groups on awareness of own feelings.

H_o: There is no difference between second grade experimental and second grade control groups on awareness of own feelings.

H_o: There is no difference between third grade experimental and third grade control groups on awareness of own feelings.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on awarness of own feelings.

Cognitive Null Hypothesis - Awareness of Choice

H_o: There is no difference between kindergarten experimental and kindergarten control groups in awareness of choice.

H_o: There is no difference between first grade experimental and first grade control groups in awareness of choice.

H_o: There is no difference between second grade experimental and second grade control groups in awareness of choice.

H_o: There is no difference between third grade experimental and third grade control groups in awareness of choice.

H_o: There is no difference between fourth grade experimental and fourth grade control groups in awareness of choice.

Cognitive Null Hypothesis - Overcoming Perceived Expectations

H_o: There is no difference between kindergarten experimental and kindergarten control groups on overcoming perceived expectations.

H_o: There is no difference between first grade experimental and first grade control groups on overcoming perceived expectations.

H_o: There is no difference between second grade experimental and second grade control groups on overcoming perceived expectations.

H_o: There is no difference between third grade experimental and third grade control groups on overcoming perceived expectations.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on overcoming perceived expectations.

Cognitive Null Hypothesis - Developing Realistic Goals

H_o: There is no difference between kindergarten experimental and kindergarten control groups on developing realistic goals.

H_o: There is no difference between first grade experimental and first grade control groups on developing realistic goals.

H_o: There is no difference between second grade experimental and second grade control groups on developing realistic goals.

H_o: There is no difference between third grade experimental and third grade control groups on developing realistic goals.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on developing realistic goals.

Cognitive Null Hypothesis - Utilizing Strengths

H_o: There is no difference between kindergarten experimental and kindergarten control groups on utilizing strengths.

H_o: There is no difference between first grade experimental and first grade control groups on utilizing strengths.

H_o: There is no difference between second grade experimental and second grade control groups on utilizing strengths.

H_o: There is no difference between third grade experimental and third grade control groups on utilizing strengths.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on utilizing strengths.

Cognitive Null Hypothesis - Dealing with Change

H_o: There is no difference between kindergarten experimental and kindergarten control groups on dealing with changes.

H_o: There is no difference between first grade experimental and first grade control groups on dealing with changes.

H_o: There is no difference between second grade experimental and second grade control groups on dealing with changes.

H_o: There is no difference between third grade experimental and third grade control groups on dealing with changes.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on dealing with changes.

Cognitive Null Hypothesis - Risking to Help Others

H_o: There is no difference between kindergarten experimental and kindergarten control groups on risking to help others.

H_o: There is no difference between first grade experimental and first grade control groups on risking to help others.

H_o: There is no difference between second grade experimental and second grade control groups on risking to help others.

H_o: There is no difference between third grade experimental and third grade control groups on risking to help others.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on risking to help others.

Cognitive Null Hypothesis - School/Community

H_o: There is no difference between kindergarten experimental and kindergarten control groups on school/community.

H_o: There is no difference between first grade experimental and first grade control groups on school/community.

H_o: There is no difference between second grade experimental and second grade control groups on school/community.

H_o: There is no difference between third grade experimental and third grade control groups on school/community.

H_o: There is no difference between fourth grade experimental and fourth grade control groups on school/community.

Data Analysis Procedures

Students' scores on the affective and cognitive instruments were used to compute class means for each grade level. Mean scores for the overall instrument and for each variable (subtest) were generated for the pretest and posttest for the experimental and control groups using the mainframe software package titled Statistical Analysis System (SAS) (SAS Institute, Inc., 1985).

After the mean scores were calculated by class for each grade level, the analysis of covariance procedure was used to analyze the posttest class scores which had been adjusted for the differences existing in the pretest scores. In the analysis, only classes with ten (10) or more students having both pretest and posttest scores were used. The results of the analysis of covariance using adjusted mean scores determined whether or not significant differences had occurred between the experimental and control groups. The unadjusted mean scores are in Appendix E.

CHAPTER 4

Results of Data Analysis

In this section adjusted mean scores on each of the instruments by group and grade level are presented and the null hypotheses, stated in the preceding chapter, are shown as either having been accepted or rejected. The results of the Principal and Teacher Surveys are also presented.

Reliability of the Affective and Cognitive Instruments

Table 1 presents a summary of reliability information for the affective and cognitive instruments used in the evaluation of the POPS pilot program. The reliability coefficient of the affective instrument, ranging from 0.82 to 0.84, are as high as most commercial instruments used in kindergarten through fourth grade. The reliability coefficients of the cognitive instrument also were high, ranging from 0.81 to 0.89. For both the cognitive and affective instruments, the reliabilities tended to be slightly higher at the lower (kindergarten and first) grade levels.

Identifying Dimensions of Affective Instrument

The factor procedure of SAS (SAS Institute, Inc., 1985) was used to examine the structure of the self-concept instrument. It was applied to the self-esteem data with these options: principal components analyses to extract factors, principal factor analyses to determine the optimal number of factors, and "scree" tests to verify the number of factors. Also specified was the varimax orthogonal solution.

Table 1

Summary of Reliability Information for Cognitive and Affective Instruments

Grade Level	Number of Students	Reliability of Survey on Self-Esteem for Children (K-4)* (Affective)	Number of Students	Reliability of POPS Student Assessment Survey Questions* (Cognitive)
K	917	.83	836	.89
1	1,157	.84	1,149	.85
2	1,116	.83	1,107	.81
3	1,062	.82	1,038	.82
4	1,179	.82	1,148	.81
Total	5,431		5,278	

*Split-Half Reliability was adjusted using Spearman-Brown Prophecy Formula.

In the final analyses, the number of factors was set at four (4). The factor structure of the instrument held up for the pre and post data for the five (5) grade levels. It was decided to use the factors in further describing the instruments.

The factors were school/academic, individual, social, and recreation. The alignment of survey questions with the factors (or dimensions) is as follows:

<u>School/Academic</u>

1. How do you feel about your principal?
2. How do you feel about your teacher?
3. How do you feel about your school building?
4. How do you feel about your classroom?

5. How do you feel about reading (2-4)/being told a story in school (K-1)?

6. How do you feel about writing (3-4)/printing (1-2)/learning letters (K)?

7. How do you feel about mathematics (1-4)/counting (K)?

Individual

1. How do you feel about playing at home?

2. How do you feel about the way you look?

3. How do you feel about how smart you are?

4. How do you feel about your clothing?

Social

1. How do you feel about your classmates?

2. How do you feel about your neighbors?

3. How do you feel about parents (step) or who takes care of you?

4. How do you feel about other family members?

Recreation

1. How do you feel about your playground?

2. How do you feel about playing in gym class?

3. How do you feel about playing at school?

Results of Affective Instrument

The results of the analyses of the affective scores may be found in Tables 2 through 6. The null hypotheses stated that there were no differences in the experimental and control groups on the affective instrument.

Only with the results from the first grade were some of the null

hypotheses rejected. The results given in Table 2 show that first grade students in the experimental group scored statistically significantly higher than first grade students in the control group. The probability of the F-value was 0.05 level. This may indicate that first grade student attitudes may be changed using the POPS program over a 16-week period whereas the other grades may need more time, a different content, or a different program, or may never change.

Of the four (4) factors or dimensions, only on the school/academic dimension was there a statistically significant difference. Table 3 shows the experimental group first grade students scoring significantly higher than the control group first grade students on the school/academic dimension; the probability of the F-value was 0.01 level. Apart from statistical significance, it should be noted that the experimental groups overall outscored the control groups. Kindergarten and fourth graders were exceptions (Table 2).

Control group kindergarteners did better than experimental group kindergarteners on all areas except individual (Table 4), on which their mean scores were equal. Experimental group first graders consistently outscored their control group counterparts in all areas (Table 5). Control group second graders did better than the experimental group second graders except on two dimensions: overall (Table 2) and on recreation (Table 6). The experimental group third grade outscored the control group third grade overall and on all dimensions except social. The experimental group fourth grade outscored the control group fourth grade on only two dimensions, individual and recreation.

The preceding results are only comparisons (refer to Tables 2 through 6) of adjusted posttest mean scores of the experimental and control groups and are not tests of significance. The comparison of adjusted posttest mean scores overall favored the experimental group schools in the first, second and third grades and favored the control group schools in the kindergarten and fourth grade. The comparison of adjusted posttest mean scores for the school/academic dimension favored first and third grades in the experimental group, and kindergarten, second and fourth grades in the control group. The comparison of adjusted posttest mean scores for the individual dimension favored experimental group first, third and fourth grades, and control group in the second grade. The experimental and control kindergartens had the same adjusted posttest mean score. The comparison of adjusted posttest mean scores for the social dimension favored the first grade in the experimental group and the kindergarten, second, third and fourth grades in the control group. The comparison of adjusted posttest mean scores for the recreation dimension favored the first through the fourth grades in the experimental group and the kindergarten control group.

The results of the comparisons on the affective measure are given in Chart A. From the chart, it appears that the POPS treatment was the stronger at grades 1 and 3; also that the POPS treatment was the stronger overall and in the dimensions of Individual and Recreation.

Chart A

Group with Highest Adjusted Mean by Group by Dimension.

	Overall	School/Academic	Individual	Social	Recreation
K	C	C	E/C Tied	C	C
1	E	E	E	E	E
2	E	C	C	C	E
3	E	E	E	C	E
4	C	C	E	C	E

Table 2

Analysis of Covariance for Self-Esteem Test by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	82.13 (25)[4]	82.85 (18)	0.59	0.45	NS
First	81.63 (38)	79.78 (30)	4.05	0.05	S
Second	78.27 (33)	78.10 (30)	0.05	0.82	NS
Third	76.51 (36)	75.11 (29)	3.41	0.07	NS
Fourth	72.80 (37)	73.06 (30)	0.11	0.74	NS

[1]Scores could range from 18-90.
[2]$p < 0.05$
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 3

Analysis of Covariance for Affective Variable School/Academic by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	31.58 (25)[4]	31.68 (18)	0.05	0.83	NS
First	31.09 (38)	29.76 (30)	7.09	0.01	S
Second	28.98 (33)	29.00 (30)	0.00	0.96	NS
Third	27.92 (36)	27.05 (29)	3.08	0.08	NS
Fourth	25.91 (37)	26.13 (30)	0.20	0.65	NS

[1]Scores could range from 7-35.
[2]p <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 4

Analysis of Covariance for Affective Variable Individual by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	18.34 (25)[4]	18.34 (18)	0.00	0.97	NS
First	18.19 (38)	18.02 (30)	0.44	0.51	NS
Second	17.19 (33)	17.63 (30)	0.65	0.43	NS
Third	17.54 (36)	17.32 (29)	0.99	0.32	NS
Fourth	17.16 (37)	17.02 (30)	0.56	0.46	NS

[1]Scores could range from 4-20.
[2]p <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 5

Analysis of Covariance for Affective Variable Social
by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	18.29 (25)[4]	18.48 (18)	0.55	0.46	NS
First	18.32 (38)	18.00 (30)	1.62	0.21	NS
Second	17.76 (33)	17.83 (30)	0.11	0.74	NS
Third	17.61 (36)	17.65 (29)	0.06	0.81	NS
Fourth	17.16 (37)	17.38 (30)	1.12	0.29	NS

[1]Scores could range from 4-20.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 6

Analysis of Covariance for Affective Variable Recreation
by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	14.11 (25)[4]	14.27 (18)	1.01	0.32	NS
First	14.26 (38)	14.03 (30)	2.63	0.11	NS
Second	13.76 (33)	13.64 (30)	0.69	0.41	NS
Third	13.43 (36)	13.21 (29)	1.79	0.19	NS
Fourth	12.58 (37)	12.50 (30)	0.19	0.67	NS

[1]Scores could range from 3-15.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Subtests of Cognitive Instrument

Eight (8) subtests were created from the goals and objectives provided by PCI. The following are the subtests and the questions related to each subtest.

Awareness of Own Feelings (or Self-Awareness)

1. Is it okay to be different from your friends?
2. Can you talk yourself into getting things done?
3. Is it okay if you are not good at doing some things?

Awareness of Choice

1. Do you make choices every day?
2. Do you think about what happens before you make a choice?
3. Are there things to do and think about to make a good choice?
4. Can you think of ways to feel better when sad things happen?

Overcoming Perceived Expectations

1. Is it okay if some things are hard for you to do?
2. Will things you <u>can do</u> help you do things you cannot do?
3. Are there things you can do or think about to make difficult things easier?

Developing Realistic Goals

1. Can you name the things that you are good at doing?
2. Do you think about what you are good at before you try something new?
3. Can you think of things you might have to do to get something you really want?

Utilizing Strengths

1. Is it okay to be good at something even if your friends do not like it?

2. Do you sometimes have to give up things you like when you work for something you really want?

3. When you decide to work for something is that a promise you should keep?

4. Should you give up if something will take a long time to get?

Dealing with Change

1. Are there things which happen that cannot be changed?

2. Are there ways to feel better when things change and you don't like it (i.e., moving away, your pet dies, a new sister or brother is born)?

3. Do things happen when there is a change?

Risking to Help Others

1. Does everyone have something good about them?

2. Is it good to help someone who needs you?

3. Can both good and bad things happen when you help someone?

4. Would you help someone that your friends do not like?

School/Community

1. Can your school be made a better place?

2. Will it help you if you make your school a better place?

3. Are there things you can do to make your school a better place?

Results of Cognitive Instrument

The results of the analyses of the cognitive scores may be found in Tables 7 through 15. The null hypotheses stated that there is no difference between the experimental and control group students' knowledge of how one can improve his/her self-esteem. The results for the total cognitive instrument (Table 7) indicate that second grade students in the experimental group scored

significantly higher than second grade students in the control group; the probability of the F-value for the effect was less than 0.05 level. Kindergarten students in the control group scored significantly higher than kindergarten students in the experimental group on the dealing with change variable; the probability of the F-value for the effect was less than 0.05 level (Table 13). First grade students in the control group scored significantly higher than first grade students in the experimental group on the variable developing realistic goals; the probability of the F-value for the effect was 0.05 level (Table 11). Second grade students in the experimental group scored significantly higher than second grade students on two variables of the instrument: awareness of choice (Table 9) and school/community (Table 15); the probabilities of the F-value for both effects was 0.05 level. Third grade students in the experimental group scored significantly higher than third grade students in the control group on the variable school/community (Table 15); the probability of the F-value for the effect was 0.01 level. Fourth grade students in the experimental group scored significantly higher than students in the control group for two variables: developing realistic goals (Table 11) and school/community (Table 15); the probability of the F-value for both effects was 0.05 level or less.

The following results are only comparisons (refer to Tables 7 through 15) of adjusted posttest mean scores of the experimental and control groups and are not tests of significance. The comparison of adjusted posttest means overall favored the experimental group in the second, third and fourth grades and the kindergarten and first grade in the control group (Table 7). The comparison of adjusted posttest mean scores for the awareness of own feelings variable favored first, second and fourth graders in the experimental group and the kindergarten and third grade in the control group (Table 8). The

comparison of adjusted posttest mean scores for the awareness of choice variable favored kindergarten, first and third grades in the control group and the second grade in the experimental group (Table 9). The experimental and control fourth grades scored the same. The comparison of adjusted posttest mean scores for the overcoming perceived expectations variable favored second, third and fourth grades in the experimental group and the kindergarten and first grade in the control group (Table 10). The comparison of adjusted posttest mean scores for the developing realistic goals variable favored the second and fourth grades in the experimental group and the kindergarten, first and third grades in the control group (Table 11). The comparison of adjusted posttest mean scores for the utilizing strengths variable favored the second and fourth grades in the experimental group and the kindergarten, first and third grades in the control group (Table 12). The comparison of adjusted posttest mean scores for the dealing with change variable favored the first, second and fourth grades in the experimental group and the kindergarten and third grade in the control group (Table 13). The comparison of adjusted posttest mean scores for the risking to help others variable favored second, third and fourth grades in the experimental group and the kindergarten and first grade in the control group (Table 14). The comparison of adjusted posttest mean scores for the school/community variable favored first through the fourth grades in the experimental group and kindergarten in the control group (Table 15). See Chart B for explanation.

Chart B

Group with Highest Adjusted Mean by Grade by Subtest

Level	Overall	Own Feelings	Choice	Expect.	Goals	Strengths	Change	Help	School Community
K	C	C	C	C	C	C	C	C	C
1	C		C	C	C	C	E	C	E
2	E	E	E	E	E	E	E	E	E
3	E	C	C	E		C	C	E	E
4	E	E		E	E	E	E	E	E

E = Experimental
C = Control

Table 7

Analysis of Covariance for Cognitive Instrument
by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	61.37 (22)[4]	63.52 (18)	2.68	0.11	NS
First	65.86 (39)	66.70 (30)	0.97	0.33	NS
Second	69.14 (34)	67.19 (29)	4.99	0.03	S
Third	68.72 (35)	67.95 (29)	1.04	0.31	NS
Fourth	69.67 (35)	68.31 (31)	3.28	0.08	NS

[1]Scores could range from 27-81.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 8

Analysis of Covariance for Cognitive Variable Awareness of Own Feelings
by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	7.00 (22)	7.19 (18)	1.02	0.32	NS
First	7.73 (39)	7.72 (30)	0.00	0.94	NS
Second	8.06 (34)	7.97 (29)	0.48	0.49	NS
Third	7.95 (35)	7.99 (29)	0.14	0.71	NS
Fourth	8.17 (35)	8.07 (31)	1.25	0.27	NS

[1]Scores could range from 3-9.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 9

Analysis of Covariance for Cognitive Variable Awareness of Choice by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	8.67 (22)[4]	8.82 (18)	0.30	0.59	NS
First	9.14 (39)	9.37 (30)	1.54	0.22	NS
Second	9.80 (34)	9.41 (29)	4.64	0.04	S
Third	9.65 (35)	9.68 (29)	0.03	0.85	NS
Fourth	9.98 (35)	9.98 (31)	0.00	0.99	NS

[1]Scores Could Range from 4-12.
[2]$p < 0.05$
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 10

Analysis of Covariance for Cognitive Variable Overcoming Perceived Expectations by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	6.71 (22)[4]	6.89 (18)	0.80	0.38	NS
First	7.06 (39)	7.22 (30)	1.15	0.29	NS
Second	7.37 (34)	7.18 (29)	2.14	0.15	NS
Third	7.33 (35)	7.24 (29)	0.39	0.54	NS
Fourth	7.32 (35)	7.25 (31)	0.25	0.62	NS

[1]Scores could range from 3-9.
[2]$p < 0.05$
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 11

Analysis of Covariance for Cognitive Variable Developing Realistic Goals by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	7.31 (22[4])	7.36 (18)	0.05	0.82	NS
First	7.31 (39)	7.55 (30)	4.15	0.05	S
Second	7.66 (34)	7.55 (29)	0.59	0.45	NS
Third	7.47 (35)	7.48 (29)	0.01	0.91	NS
Fourth	7.51 (35)	7.31 (31)	3.85	0.05	S

[1]Scores could range from 3-9.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 12

Analysis of Covariance for Cognitive Variable Utilizing Strengths by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	8.90 (22)	9.03 (18)	0.57	0.45	NS
First	9.60 (39)	9.80 (30)	1.75	0.19	NS
Second	10.34 (34)	10.18 (29)	0.90	0.35	NS
Third	10.34 (35)	10.39 (29)	0.09	0.76	NS
Fourth	10.46 (35)	10.32 (31)	1.43	0.24	NS

[1]Scores could range from 4-12.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 13

Analysis of Covariance for Cognitive Variable Dealing with Change by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	6.49 (22)[4]	7.04 (18)	4.43	0.04	S
First	7.44 (39)	7.39 (30)	0.10	0.75	NS
Second	7.69 (34)	7.53 (29)	1.06	0.31	NS
Third	7.67 (35)	7.73 (29)	0.29	0.59	NS
Fourth	7.94 (35)	7.72 (31)	3.39	0.07	NS

[1]Scores could range from 3-9.
[2]$p < 0.05$
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 14

Analysis of Covariance for Cognitive Variable Risking to Help Others by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	9.59 (22)[4]	10.01 (18)	1.58	0.22	NS
First	10.33 (39)	10.37 (30)	0.05	0.83	NS
Second	10.58 (34)	10.37 (29)	2.08	0.15	NS
Third	10.62 (35)	10.55 (29)	0.22	0.64	NS
Fourth	10.72 (35)	10.60 (31)	0.60	0.44	NS

[1]Scores could range from 4-12.
[2]$p < 0.05$
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Table 15

Analysis of Covariance for Cognitive Variable School/Community by Grade

GRADE	Adjusted Mean Scores[1] for Posttest EXPERIMENTAL	CONTROL	F-VALUE	PROBABILITY[2]	SIG.[3]
Kindergarten	6.87 (22)[4]	7.03 (18)	0.40	0.53	NS
First	7.18 (39)	6.99 (30)	1.55	0.22	NS
Second	7.51 (34)	7.03 (29)	8.65	0.01	S
Third	7.45 (35)	7.02 (29)	6.74	0.01	S
Fourth	7.50 (35)	7.08 (31)	5.43	0.02	S

[1]Scores could range from 3-9.
[2]P <0.05
[3]NS - Not Significant; S - Significant
[4]N given in parenthesis in each group is the number of classrooms.

Results of Principal Survey

An evaluation survey of the POPS program was sent to all county superintendents for distribution to all principals participating in the program. One hundred ninety-one (191) principals of the 392 principals participating in the program responded (Appendix C).

The following are findings of the survey: Ninety-one percent (91%) of the principals responding felt that they had received the modules in a timely fashion. Thirty-one percent (31%) of the principals had no other program in their school designed to enhance student self-concept. Aproximately 96% of the principals felt the POPS program was a positive addition to their curriculum and 70% observed positive changes in students as a result of the POPS program. Seventy-eight percent (78%) of the principals felt their teachers perceived the

POPS program to be an important part of the curriculum. Seventy-six percent (76%) reported that their teachers participated in county and staff development activities concerning POPS. Approximately 69% felt the POPS program had an overall positive effect on teacher self-concept. Eighty-two percent (82%) of the principals previewed the student and teacher materials. Eighty-five percent (85%) of the principals made the parents and community aware that the POPS program was being used in their schools. Ninety-three percent (93%) of the principals reported they would recommend the POPS program to other schools to improve self-concept and 90% planned to use the modules again. Four percent (4%) of the principals felt that the parents/community had some objections to using the POPS program. Seven percent (7%) of the principals believed that teachers had objections to using the POPS program and three percent (3%) of the principals thought that county boards of education objected to using the program.

On a scale of one (very negative) to five (very positive), the principals rated teachers' feelings about the quality of POPS student and teacher materials above four (4). Principals rated student reaction to student materials provided in the modules at 4.32. Finally, they rated the effect of the POPS materials on the overall climate of the school at 3.82.

Results of POPS Teacher Survey

The POPS Teacher Survey was sent to the 392 schools which piloted the POPS program. Approximately 800 or 25% of the teachers returned completed questionnaires. The following is an overall analysis of the survey.

Eighty-five percent (85%) of the teachers felt they were not hindered by how and when materials were given to them. Only 16% helped plan how to implement POPS. Seventy-two percent (72%) reported that a VCR or monitor was available when they needed it. Eighty-four percent (84%) of the teachers took one hour or

less to teach a single POPS videocassette. Eighty-three percent (83%) of the teachers found the POPS materials appropriate for their students. Seventy-four percent (74%) felt the stories and characters usually related to the students. Approximately 55% used the videocassette in a single setting, 18% used it in segments, and 28% used it both ways. Table 16 is a chart of the teachers' ratings of the POPS materials based on a scale of one (low) to five (high).

Table 16

Mean Results of POPS Teacher Survey
by Component and Question

Component and Question	Mean
Video Guide - Quality of Material	4.2
Video Guide - Value to You	4.0
Video Guide - Extent of Use	3.7
Teachers Own Quality of Material	3.9
Teachers Own Value to You	3.7
Teachers Own Extent of Use	3.5
Parental Guide - Quality of Material	3.6
Parental Guide - Value to You	3.0
Parental Guide - Extent of Use	2.7
Video Tapes - Quality of Material	4.5
Video Tapes - Value to You	4.4
Video Tapes - Extent of Use	4.4
Audio Tapes - Quality of Material	3.7
Audio Tapes - Value to You	3.3
Audio Tapes - Extent of Use	3.0

According to Table 16 videocassettes and the video guides received the highest ratings while the parental guides and audiocassettes received the lowest ratings. Only 70% of the support materials were sent to the parents. On a scale from one (low) to five (high), teachers felt that the parents would rate the parent guides at 3.5

The following analysis deals with overall attitudes and behaviors of teachers using the POPS program. Eight-five percent (85%) of the teachers reported student attitudes were affected positively by the POPS program and 76% felt the POPS program promoted a positive attitude in the classroom. Ninety-seven percent (97%) of the teachers believed student self-concept is related to achievement. Before POPS, approximately 70% of the teachers would agree with the statement, "I am okay;" after POPS 83% agreed with this statement. Before POPS, approximately 52% of the teachers had used other programs designed to enhance student self-concept. While using POPS, only 41% continued to use another program designed to enhance student self-concept. Seventy-three percent (73%) completed all four (4) modules.

Tables 17 and 18 provide mean responses by grade to some of the questions from the Teacher Survey.

Table 17

Percent of Responses by Grade to the Question:
Did Your Students Relate to the
Stories and Characters in
the POPS Video Tapes?

Grade	Usually	Sometimes	Never
Kindergarten	55.4	40.0	4.6
First	66.9	31.6	1.5
Second	82.2	17.8	0.0
Third	82.4	21.4	0.0
Fourth	78.6	21.4	0.0

Table 17 shows teachers felt second, third and fourth grade students related more to the stories and characters in the POPS videocassettes than younger grades.

Table 18

Percent of Responses by Grade Showing Change in Attitude to the Statement, "I'm Okay"

Grade	Before	After
Kindergarten	58.5	81.5
First	60.0	81.3
Second	72.1	84.4
Third	69.0	80.6
Fourth	67.7	80.6

Table 18 shows that the percent of teachers who agree with the statement, "I'm okay," changed substantially during the implementation period. The biggest increases were experienced by kindergarten and first grade teachers.

Approximately 81% of the kindergarten teachers sent POPS support materials home to the parents while only 67% of the first and third grade teachers sent POPS support materials home to parents.

CHAPTER 5

Discussion and Conclusions

The following narrative presents first, limitations of the study and second, discussions and conclusions.

Limitations

Limitations concerning the POPS pilot program are:

1. Funds were not available to purchase a commercial self-concept instrument.
2. The implementation process of POPS was not monitored; therefore, it can only be assumed that all schools made the same degree of commitment.
3. Because the program was only a 16-week pilot study, information is not available regarding the longevity of the changes which occurred nor the time required for change to occur in self-concept.
4. The pretest but not the posttest was administered in some control schools. A t-test was conducted between the pretest mean scores which included these schools and posttest mean scores which excluded these schools; no significant difference was found.
5. A ceiling affect occurred on the pretest student scores. This permitted little leeway for gains on the posttest scores.

Discussion and Conclusions

A list of comments regarding discussion and conclusions on the POPS Evaluation follows:

Affective Instrument

1. There is a ceiling effect in kindergarten and it is very difficult to measure the impact of the POPS program at this grade level. Kindergarten students' self-esteem is very high and the POPS program may only serve as entertainment and not as a means to increase self-esteem.
2. The program was effective in the first grade. First grade students in the experimental group scored significantly higher than first grade students in the control group, therefore indicating that the POPS program can increase self-esteem in first graders in the short 16-week period. The variable most instrumental to the increase was school/academic. First graders may be focusing more on developing independent academic skills and moving away from teacher dependency.
3. Experimental and control group second, third and fourth graders showed no significant difference, which suggests that the program may need to be used for a longer period of time. Silvernail (1985) indicated that "student self-concept becomes more negative through the schooling years." By the third and fourth grades, student values are more established, and more time may be needed to reverse the negative trend.

Cognitive Instrument

1. The program was effective in the second grade. Second grade students in the experimental group scored significantly higher than second grade students in the control group. The POPS program increased student awareness of own feelings (self-esteem) in the second grade during the 16-week period.

2. Kindergarten, first, third and fourth grades showed no significant difference for the overall test.

   a. Sixteen (16) weeks may not be enough time to teach all of the POPS objectives to the third and fourth grades.

   b. Kindergarten and first grade students found the instrument to be very difficult and, therefore, the scores may not be reliable.

   c. School/community, a subtest of the cognitive instrument, was a variable on which experimental group students scored significantly higher than the control group in the second, third and fourth grades. The POPS program increased the student awareness about the need to make their school a better place to learn.

Principal Survey

1. One (1) out of every three (3) principals who responded to the survey said they had no other program in their school designed to enhance student self-concept.

2. Approximately 96% of the responding principals felt that POPS was a positive addition to their curriculum, 90% said they would use the modules again, and 93% said they would recommend the POPS program to other schools to improve self-concept. This is a very positive response from the principals concerning their feelings about the POPS program.

Teacher Survey

1. Only 16% of the teachers who responded felt they were involved in the implementation of the POPS program. In order for the POPS program to become more effective, a greater percentage of teachers need to be

involved in the implementation process. If teachers are adequately trained and feel a part of the implementation process, they will do a better job of teaching the program to the students. The Teacher's Own and audio tapes, which are components of the POPS program, need to be incorporated into the implementation process to make it more effective. This may assist teachers in developing further understanding of the concepts of self-esteem.

2. The teachers rated as highest the quality of the videotapes and as lowest the quality of the audiotapes. PCI needs to improve the quality of the audiotapes.

3. Eighty-five percent (85%) of the teachers reported attitudes were affected positively and 76% felt POPS promoted a positive attitude in the classroom. The majority of teachers felt POPS to be a positive program.

4. Table 17 shows an upward trend from kindergarten to third grade in how students relate to the stories and characters in the POPS video tapes. At the fourth grade the trend declines. This may be due to the age of the actors who play the characters. For fourth graders, older actors may need to be used to represent role models.

Synopsis

1. This evaluation is for a 16-week pilot program for kindrgarten through fourth grade. POPS is a tri-dimensional, multi-media program involving teachers, students and parents. This was primarily a student evaluation but also gave principals and teachers a chance to share their feelings about the program.

2. The research showed first grade students increased their self-esteem and second grade students increased their awareness of self-esteem by using the POPS program. Further research should be conducted, especially in two areas: 1) using standard lengths of time for the program to be taught each day and 2) varying the number of weeks each module needs to be taught to determine when it is effective in the higher elementary grades.

3. In order for this program or any program dealing with self-concept to be effective, there should be annual intervention following the students through school and follow-up studies to determine the enduring effects of the program. While the POPS program is used at the kindergarten through fourth grade levels, other programs should be developed to follow the students as they advance by grade through the education system.

4. The POPS program does not try to address achievement as an effect of self-esteem; therefore, change in achievement was not measured. POPS begins to address the following objectives: awareness of own feelings, awareness of choice, overcoming perceived expectations, developing realistic goals, utilizing strengths, dealing with changes, risking to help others, and school/community. These objectives were measured by the evaluation.

5. Because parents and teachers play a major role in how a child's self-concept is molded, their roles in POPS should be evaluated. Unless principals, teachers, parents and students work together, student self-concept will continue to decline as the students progress through the school system.

6. The POPS program is merely one component of what a total developmental guidance program should be. Although this program was mainly focused on K-4, the concepts presented are applicable to all ages. Further program development and/or the utilization of existing programs are imperative in attempting to reduce or eradicate the negative trend in self-concept.

7. The POPS materials were being field tested as they were being developed. Feedback was being provided to PCI as the schools completed each module, which assisted in improving the next module. Consequently, problems with the early modules were in some cases resolved with later modules. Unfortunately, these procedures to improve the product led to an evaluation of a product which changed between the beginning and end of the implementation period.

8. Because there were no controls placed on the control schools, other self-concept teaching programs may or may not have been used by the control schools during the 16-week experimental period. The effects of these programs may have influenced the results of this study.

APPENDIX A

Affective Instrument, Instructions, and Answer Sheets

SURVEY ON SELF-ESTEEM FOR CHILDREN (K-4)

DIRECTIONS TO TEST ADMINISTRATOR

Administrator's Preparation for the Survey

The survey is to be administered in one session. The students must recognize the purpose of the study and that is to help discover the attitudes they have toward their school, community, and themselves. The administrator should be aware of all the materials and also emphasize confidentiality. The materials include a one-page survey consisting of eighteen items and two answer sheets, one answer sheet with three faces and one with five faces. The answer sheet with three faces is for kindergarten and first grade. The answer sheet with five faces is for second, third and fourth graders. As a general guide, plan to allow for twenty-five minutes for the student to complete survey and ten minutes preparation time.

Administering the Survey

Have students clear their desks and take out a pencil with an eraser. Distribute one answer sheet to each student.

Read the following instructions to the students. As you read the directions hold up an answer sheet and point to the appropriate part of it. Check to see if the students are filling in the information properly.

> Find the word "Name" on the line at the top left hand of your answer sheet. Print your first name and your last name on the line.
>
> To the right of your name are the letters B and G. Circle the B if you are a boy and circle the G if you are a girl.
>
> I am going to ask you some questions about yourself and things around you. There are no wrong or right answers. Think carefully about each question and choose the answer which best shows how you feel. There is only one answer for each question.

Demonstrate the next directions on the chalkboard. For kindergarten and first grade draw three faces. For second, third and fourth grade draw five faces.

> You will answer each question by marking an "X" on the face which best shows how you feel.
>
> Let's try one using the chalkboard. You will not answer this one; I will answer this one for you to show you how to mark the face.
>
> How do you feel about ice cream?

SURVEY ON SELF-ESTEEM FOR CHILDREN (K-4) (Continued)

DIRECTIONS TO TEST ADMINISTRATOR

The following are directions for three face answer sheets used for kindergarten and first grade:

If you feel happy about ice cream, then mark an "X" on this face. (Point to the face on the left.)

If you feel sad about ice cream, then mark an "X" on this face. (Point to the face on the right.)

If you do not feel happy or you do not feel sad about ice cream, mark an "X" on the middle face on the chalkboard. (Point to the face and then mark the face in the middle.)

The following are directions for five face answer sheets used for second, third and fourth grade:

If you feel very happy about ice cream, then mark an "X" on this face. (Point to the face on the far left.)

If you feel a little happy about ice cream, then mark an "X" on this face. (Point to the face second from the left.)

If you feel very sad about ice cream, then mark an "X" on this face. (Point to the face on the far right.)

If you feel a little sad about ice cream, then mark an "X" on this face. (Point to the second face from the right.)

If you feel neither happy nor sad about ice cream, then mark an "X" on this face. (Point to the face and then mark the face in the middle.)

Ask the students if they have any questions. You should have them point to a face on their answer sheet on how they feel about ice cream as a final check. Be sure to help the younger students with their marking and walk around the room to make sure the students are answering the right question.

Read each question twice. Begin each question with "how do you feel about" and then the item. Questions 7, 8 and 9 have different wording for different developmental levels. Use the appropriate option for the designated grade levels; the options are separated by slash marks (/).

Now we are ready to begin.

Question number one is how do you feel about .... Mark an "X" on the face which best shows how you feel. (Remind the students what each face means.) Again question number one is .... (Pause)

After pausing to make sure all students have had time to mark the answer, go on to the next question.

Number two is how do you feel about .... (Pause)

DIRECTIONS TO TEST ADMINISTRATOR

Continue in this manner until you have read all the questions.

Collect the answer sheets. Complete a pink Cover Sheet and place it on top of the stack of answer sheets. Put the stack into the small envelope provided.

There should be a small envelope with a pink Cover Sheet and a stack for each classroom in which you have administered the survey. For example, if you administer the test to two kindergartens, one first grade, two second grades, one third grade, and one fourth grade, you should have completed seven Cover Sheets and assembled seven small envelopes; each envelope has a stack of answer sheets with one Cover Sheet on the top of the stack.

Put all small envelopes for a school in the large pre-addressed envelope which has the school's name in the upper left corner. Please mail all large envelopes no later than Tuesday, May 31, 1988.

If you have any questions, please contact Larry White at the West Virginia Department of Education, (304) 348-8830.

Thank you for your time and your help.

SURVEY ON SELF-ESTEEM FOR CHILDREN (K-4)

How do you feel about ...?

1. Your Principal
2. Your Teacher
3. Your Classmates
4. Your School Building
5. Your Playground
6. Your Classroom
7. Reading (2-4)/Being Told a Story in School (K-1)
8. Writing (3-4)/Printing (1-2)/Learning Letters (K)
9. Mathematics (1-4)/Counting (K)
10. Playing in Gym Class (Phys Ed., Structured Play)
11. Playing at School
12. Playing at Home
13. Your Neighbors
14. Parents (Step) or Who Takes Care of You
15. Other Family Members
16. The Way You Look
17. How Smart You Are
18. Your Clothing

NAME: _____ B G

10			
11			
12			
13			
14			
15			
16			
17			
18			

B G

NAME: _____ _____

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10

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18

APPENDIX B

Cognitive Instrument, Instructions,

and Answer Sheets

POPS STUDENT ASSESSMENT SURVEY

Directions to Test Administrator

Have students clear their desks and take out a pencil. Make sure each student has a pencil so that they may erase an answer if necessary. Distribute one answer sheet to each student.

Read the following instructions to the students. As you read the directions hold up an answer sheet and point to the appropriate part of it. Check whether the students are following your instructions correctly.

> Find the "Name" at the top of your answer sheet.
>
> Please PRINT your first name and your last name on the line after the word "Name."
>
> Next to your name are a B and a G. Circle the B if you are a boy or circle the G if you are a girl.
>
> I am going to ask you some questions about what you know, what you think, and what you can do. Please think about each question carefully before you answer. You will not be graded on your answers, but please answer as best as you can.

Demonstrate the next directions on the chalkboard. Print the words "Yes," "No" and "Do Not Know" as you give the instructions, and circle the "Do Not Know" as an example.

> You will answer each question with a "Yes", "No" or "Do Not Know." If you think the answer is yes, then circle the word "Yes." If you think the answer is no, circle the word "no." If you do not know the answer, then circle the words "Do Not Know."
>
> You may erase your answer if you change your mind. But be sure you erase all of the old circle before drawing a new circle around your new answer.
>
> Let's try a couple of samples.
>
> Find on your answer sheet the A under your name.
>
> The question is "do you know how to be helpful at home?" If you think the answer is yes, then circle the word "Yes." If you think the answer is no, then circle the word "No." If you do not know the answer, circle the words "Do Not Know."
>
> Please circle your answer.

(Continued on Page Two.)

Let's try another. Find the B on your answer sheet. The question is "can you make new friends at school?" Now mark your answer sheet. Remember, if you think the answer is yes, then circle the word "Yes"; if you think the answer is no, circle the word "No"; if you do not know the answer, then circle the words "Do Not Know."

Check the answer sheets to see whether the students understand how to mark their answers.

Our practice is over. Now let's go on to question number one.

Find the number one on the answer sheet; you will mark you answer next to it.

Question number one is ....

Now draw a circle around the "Yes" if you think the answer is yes, around "No" if you think the answer is no, or around "Do Not Know" if you do not know the answer.

I will read the question over again. Question number one is ....

Read each question twice. If students do not understand, do not explain a question; tell the students to do the best that they can. If they really do not understand the question, tell them to mark "Do Not Know."

After pausing to make sure all students have had time to mark their answers, go on to the next question.

Question number two is .... Mark your answer by drawing a circle around "Yes", "No" or "Do Not Know." Question number two is .... (Pause)

Continue in this manner until you have read all the questions.

Collect the answer sheets. Complete a blue Cover Sheet and place it on top of the stack of answer sheets. Put the stack into the small envelope provided.

There should be a small envelope with a blue Cover Sheet and a stack for each classroom in which you have administered the survey. For example, if you administer the test to two kindergartens, one first grade, two second grades, one third grade and one fourth grade, you should have completed seven Cover Sheets and assembled seven small envelopes; each envelope has a stack of answer sheets with one Cover Sheet on top of the stack.

Put all small envelopes for a school in the large pre-addressed envelope which has the school's name in the upper left corner. Please mail all large envelopes no later than Tuesday, May 31, 1988.

If you have any questions, please contact Larry White at the West Virginia Department of Education, (304) 348-8830.

Thank you for your time and your help.

1103s/WEST VIRGINIA DEPARTMENT OF EDUCATION

POPS STUDENT ASSESSMENT SURVEY QUESTIONS

PRACTICE QUESTIONS

A. Are there ways you can be helpful at home?

B. Can you make new friends at school?

---

1. Is it okay to be different from your friends?
2. Can you talk yourself into getting things done?
3. Is it okay if you are not good at doing some things?
4. Do you make choices every day?
5. Do you think about what might happen before you make a choice?
6. Are there things to do and think about to make good choices?
7. Can you think of ways to feel better when sad things happen?
8. Is it okay if some things are hard for you to do?
9. Will things you <u>can do</u> help you do things you cannot do?
10. Are there things you can do or think about to make difficult things easier?
11. Can you name the things that you are good at doing?
12. Do you think about what you are good at before you try something new?
13. Can you think of things you might have to do to get something you really want?
14. Is it okay to be good at something even if your friends do not like it?
15. Do you sometimes have to give up things you like when you work for something you really want?
16. When you decide to work for something, is that a promise you should keep?
17. Should you give up if something will take a long time to get?
18. Are there things which happen that cannot be changed?
19. Are there ways to feel better when things change and you don't like it? (i.e., moving away, your pet dies, a new sister or brother is born)
20. Do good things sometimes happen when there is a change?

21. Does everyone have something good about them?

22. Is it good to help someone who needs you?

23. Can both good and bad things happen when you help someone?

24. Would you help someone that your friends do not like?

25. Can your school be made a better place?

26. Will it help you if you make your school a better place?

27. Are there things you can do to make your school a better place?

ANSWER SHEET
POPS STUDENT ASSESSMENT SURVEY

NAME _____BOY _____GIRL____

A.	YES	NO	DO NOT KNOW
B.	YES	NO	DO NOT KNOW

1.	YES	NO	DO NOT KNOW
2.	YES	NO	DO NOT KNOW
3.	YES	NO	DO NOT KNOW
4.	YES	NO	DO NOT KNOW
5.	YES	NO	DO NOT KNOW
6.	YES	NO	DO NOT KNOW
7.	YES	NO	DO NOT KNOW
8.	YES	NO	DO NOT KNOW
9	YES	NO	DO NOT KNOW
10.	YES	NO	DO NOT KNOW
11.	YES	NO	DO NOT KNOW
12.	YES	NO	DO NOT KNOW

(TURN OVER)

(CONTINUED)

13.	YES	NO	DO NOT KNOW
14.	YES	NO	DO NOT KNOW
15.	YES	NO	DO NOT KNOW
16.	YES	NO	DO NOT KNOW
17.	YES	NO	DO NOT KNOW
18.	YES	NO	DO NOT KNOW
19.	YES	NO	DO NOT KNOW
20.	YES	NO	DO NOT KNOW
21.	YES	NO	DO NOT KNOW
22.	YES	NO	DO NOT KNOW
23.	YES	NO	DO NOT KNOW
24.	YES	NO	DO NOT KNOW
25.	YES	NO	DO NOT KNOW
26	YES	NO	DO NOT KNOW
27.	YES	NO	DO NOT KNOW

(STOP)

APPENDIX C

Principal Survey

For WVDE Use Only
Code: _____
_____

PRINCIPAL SURVEY

West Virginia Power of Positive Students Program (POPS)

Name _____County_____School_____

Directions: Thank you for participating in this survey on the Power of Positive Students Program. Your responses will be very helpful to us in evaluating the materials and their usefulness to schools. The survey's specific purposes are to ascertain (1) the degree to which the materials were utilized in the pilot program, (2) your perception of the quality of the materials, and (3) your suggestions for improvement of the program. You will note that the survey is designed to take a minimal amount of your time and is divided into three sections. In Section I you are to simply mark "YES" or "NO" by circling the correct response. In Section II, you are asked to circle a number from one to five which most closely aligns with your perception. In Section III, you are asked to provide numerical or narrative data specific to your school.

SECTION I. Please respond by circling either YES or NO.

a. YES b. NO 1. Were modules received in a timely fashion from the superintendent and/or Positive Communications?

a. YES b. NO 2. Given budget constraints, was the provision of a single copy of the module an acceptable approach?

a. YES b. NO 3. Is your school using any other program designed to enhance student self esteem?

a. YES b. NO 4. Do you feel that the POPS program has been a positive addition to your curriculum.

a. YES b. NO 5. Have you or your teachers observed any positive changes in students as a result of the POPS program?

a. YES b. NO 6. In general, did teachers perceive the POPS program to be an important part of the curriculum?

a. YES b. NO 7. Did you get support from the Board of Education with the implementation of the POPS program.

a. YES b. NO 8. Did your teachers participate in staff development activities related to POPS?

a. YES b. NO 9. Do you feel that the POPS program had any overall effect on teacher self concept?

a. YES b. NO 10. Did you take the opportunity to preview the materials used with the students?

a. YES b. NO 11. Did you take the opportunity to preview the materials provided to teachers?

a. YES b. NO 12. Did you promote that you were using this program to parents and/or community

a. YES b. NO 13. Would you recommend this program to other schools who wanted to improve student self concept?

a. YES b. NO 14. Do you plan on using the modules again next year with your students?

Did you get any significant objections to the use of this program by:

a. YES b. NO 15. Parents/Community?

a. YES b. NO 16. Teachers?

a. YES b. NO 17. Students?

a. YES b. NO 18. Board of Education?

SECTION II. Please respond to the following statements by circling the number that best describes your perception. Identified below is the scale you should use in making the response:

5 = very positive
4 = positive
3 = neutral
2 = negative
1 = very negative

1 2 3 4 5 (1) In general, how did teachers feel about the quality of the student materials provided in the modules?

1 2 3 4 5 (2) In general how did students react to the student materials provided in the modules?

1 2 3 4 5 (3) In general, how did teachers feel about the quality of the teacher materials?

1 2 3 4 5 (4) What is your perception of the extent to which the teacher audio materials used?

1 2 3 4 5 (5) What is your perception of the extent to which the teacher written materials were used?

1 2 3 4 5 (6) what effect did the POPS materials have on the overall climate of the school?

1 2 3 4 5 (7)

SECTION III. Please provide the information requested in the spaces below.

1. Approximately how many students were taught using the POPS modules?_____

2. Identify the number of sections and grades that used the POPS materials.

Example:

First Grade: 2 of the 3 sections used POPS.

Kindergarten	_____	of the	_____	sections used POPS.
First Grade:	_____	of the	_____	sections used POPS.
Second Grade:	_____	of the	_____	sections used POPS.
Third Grade:	_____	of the	_____	sections used POPS.
Fourth Grade:	_____	of the	_____	sections used POPS.
Fifth Grade:	_____	of the	_____	sections used POPS.
Sixth Grade:	_____	of the	_____	sections used POPS.

4. What changes would you suggest to make the implementation of POPS more effective?

_____

_____

_____

_____

_____

_____

NAME _____

SCHOOL _____

COUNTY _____

Return by June 5 to:
Lydia L. McCue, Assistant Director
School Improvement Unit
Capitol Complex, Bldg. #6, Room B-330
Charleston, WV 25305

1197t

APPENDIX D

Teacher Survey

Teacher's Name: _____

Grade: _____ / For WVDE Use Only /

School: _____ / Code: _____ /

County: _____ / _____ /

Please answer the following questions based on your experience of having implemented the POPS program with your own class since January.

1. Was your ability to implement the POPS program hindered by how or when the materials were given to you? Circle one.
   a. Yes b. No

2. Did you help plan how the POPS program was implemented in your school? Circle one.
   a. Yes b. No

3. Was a VCR or monitor available when you needed them? Circle only one.
   a. Always b. Sometimes c. Never

4. How long did it take you to teach a single POPS videotape and accompanying materials? Circle only one.
   a. less than one hour
   b. 1 hour
   c. 2 hours
   d. 3 hours
   e. 4 hours
   f. 5 hours
   g. 6 hours
   h. 7 hours
   i. 8 hours
   j. more than 8 hours

5. Were the student materials <u>generally</u> appropriate for your students? Circle only one.
   a. Above your students' developmental level.
   b. On your students' developmental level.
   c. Below your students' developmental level.

6. The POPS materials are most appropriate for which of the following grades. Circle all that apply.
   a. K
   b. 1
   c. 2
   d. 3
   e. 4
   f. 5
   g. 6
   h. 7
   i. 8
   j. Other (Please specify:_____)

7. Did your students relate to the stories and characters in the POPS videotapes? Circle only one.
   a. Usually b. Sometimes c. Never

8. Please rank the activities you used to implement the POPS program. Mark "1" for the activity you used most frequently, "2" for the activity you used next in terms of frequency, and so on. Do not rank any activities you did not use.
   ___ a. Whole class discussions
   ___ b. Small group discussions
   ___ c. Role play
   ___ d. Writing activities
   ___ e. Singing songs
   ___ f. Art activities
   ___ g. Activity sheets
   ___ h. Other. Please specify: _____

Teacher's Name: _____

Grade: _____ / For WVDE Use Only /

School: _____ / Code: _____ /

County: _____ / _____ /

Page Two

9. How did you use the videotapes? Circle one.
   a. Show the whole videotape at one sitting.
   b. Show the videotape in segments.
   c. Both a and b.

10. Did you preview the videotapes? Circle only one.
    a. Usually b. Sometimes c. Never

11. How would you rate the following materials? Circle the appropriate number for each item.

a. Video Guide:							
1. Quality of material	**Low**	**1**	**2**	**3**	**4**	**5**	**High**
2. Value to you	**Low**	**1**	**2**	**3**	**4**	**5**	**High**
3. Extent used	**Low**	**1**	**2**	**3**	**4**	**5**	**High**
b. Teacher's Own:							
1. Quality of material	Low	1	2	3	4	5	High
2. Value to you	Low	1	2	3	4	5	High
3. Extent used	Low	1	2	3	4	5	High
c. Parental Guide:							
1. Quality of material	Low	1	2	3	4	5	High
2. Value to you	Low	1	2	3	4	5	High
3. Extent used	Low	1	2	3	4	5	High
d. Videotapes:							
1. Quality of material	Low	1	2	3	4	5	High
2. Value to you	Low	1	2	3	4	5	High
3. Extent used	Low	1	2	3	4	5	High
e. Audiotapes:							
1. Quality of material	Low	1	2	3	4	5	High
2. Value to you	Low	1	2	3	4	5	High
3. Extent used	Low	1	2	3	4	5	High

12. Were the support materials sent to your students' parents? Circle one.
    a. Yes b. No

13. Generally, were your students' parents aware of the POPS program? Circle the appropriate number.
    Unaware 1 2 3 4 5 Aware

14. Did your students' parents try the activities listed in the Parental Guide? Circle only one number for each item.
    a. 1. All parents 2. Some parents 3. No parents 4. I don't know
    b. 1. Tried most 2. Tried some 3. Tried none 4. I don't know

15. How did your students' parents feel about the Parental Guide? Circle the appropriate number for a and then for b. Circle c if you don't know.
    a. Very Frustrated 1 2 3 4 5 Very Enthusiastic
    b. Negative 1 2 3 4 5 Positive
    c. I don't know.

16. Generally, do you feel that your students' attitudes were affected positively since you began using the POPS program? Circle one.
    a. Yes b. No

Teacher's Name: _____

Grade: _____ / For WVDE Use Only /

School: _____ / Code: _____ /

County: _____ / _____ /

Page Three

17. Generally, do you think that the POPS program promotes positive behavior in teachers? Circle one.
a. Yes b. No

18. Has the POPS program promoted a positive climate in your classroom? Circle the appropriate number.
a. Yes b. No c. No effect.

19. a. Before working with POPS did you believe that student self-concept is related to achievement? Circle one.
1. Yes 2. No

b. Have you changed your mind since working with POPS? Circle one.
1. Yes 2. No

20. a. Before working with POPS did you believe that how a teacher feels about a student influences how that student feels about himself or herself? Circle one.
1. Yes 2. No

b. Have you changed your mind since working with POPS? Circle one.
1. Yes 2. No

21. a. Before working with POPS with which of the following would you have agreed? Check only one.
1. I'm okay.
2. I'm okay but . . .
3. I'm not okay.

b. After working with POPS with which of the following do you agree? Check only one.
1. I'm okay.
2. I'm okay but . . .
3. I'm not okay.

22. Before working with POPS, has any other program designed to enhance student self-concept been used with your students? Circle one.
a. Yes b. No

23. While working with POPS, has any other program designed to enhance student self-concept been used with your students? Circle one.
a. Yes b. No

24. Circle the module(s) you have completed now.
1 2 3 4

25. Circle the module(s) you will have completed by the end of school.
1 2 3 4

Return by June 10, 1988 to: Larry White, West Virginia Department of Education
Building 6, Room B-309, Capitol Complex
Charleston, West Virginia 25305

WVDE 27-88-10

APPENDIX E

Unadjusted Means

PRETEST AND UNADJUSTED POSTTEST MEANS FOR SELF-ESTEEM

BY GROUP BY GRADE

Grades	Overall[1]				School Academic[2]				Individual[3]			
	Experimental		Control		Experimental		Control		Experimental		Control	
	N Pre	Post	N Pre	Post	N Pre	Post	N Pre	Post	N Pre	Post	N Pre	Post
Kindergarten	25 81.28	82.15	18 81.13	82.82	25 30.73	31.58	18 30.77	31.69	25 18.21	18.36	18 18.14	18.32
First Grade	38 80.52	81.33	30 81.51	80.15	38 30.08	30.90	30 30.81	30.00	38 18.29	18.22	30 18.21	18.00
Second Grade	33 77.08	77.78	30 78.80	78.64	33 28.24	28.58	30 29.50	29.45	33 17.68	17.78	30 17.72	17.64
Third Grade	36 75.71	76.18	29 76.83	75.52	36 27.44	27.69	29 28.21	27.34	36 17.32	17.50	29 17.49	17.37
Fourth Grade	37 74.23	72.74	30 74.41	73.14	37 26.77	25.84	30 26.98	26.22	37 17.36	17.23	30 17.08	16.93

[1]Range: 18-90
[2]Range: 7-35
[3]Range: 4-20

PRETEST AND UNADJUSTED POSTTEST MEANS FOR SELF-ESTEEM

BY GROUP BY GRADE

	Social[4]				Recreation[5]			
	Experimental		Control		Experimental		Control	
Grades	N Pre	Post	N Pre	Post	N Pre	Post	N Pre	Post
Kindergarten	25 18.15	18.28	18 18.23	18.49	25 13.95	14.11	18 13.98	14.28
First Grade	38 18.04	18.21	30 18.43	18.14	38 14.11	14.28	30 14.05	14.02
Second Grade	33 17.61	17.72	30 17.79	17.87	33 13.55	13.70	30 13.85	13.71
Third Grade	36 17.54	17.57	29 17.67	17.68	36 13.41	13.42	29 13.46	13.27
Fourth Grade	37 17.56	17.19	30 17.34	17.34	37 12.56	12.45	30 12.98	12.66

[4]Range: 4-20
[5]Range: 3-15

MEAN DIFFERENCES BETWEEN PRETEST AND UNADJUSTED POSTTEST FOR SELF-ESTEEM

BY GROUP BY GRADE

	Overall		School Academic		Individual	
Grades	Experimental	Control	Experimental	Control	Experimental	Control
Kindergarten	+0.87	+1.69	+0.85	+0.92	+0.15	+0.18
First Grade	+0.81	-1.36	+0.82	-0.81	-0.07	-0.21
Second Grade	+0.70	-0.16	+0.34	-0.05	+0.10	-0.08
Third Grade	+0.47	-1.31	+0.25	-0.87	+0.18	-0.12
Fourth Grade	-1.49	-1.27	-0.93	-0.76	-0.13	-0.15

MEAN DIFFERENCES BETWEEN PRETEST AND UNADJUSTED POSTTEST FOR SELF-ESTEEM

BY GROUP BY GRADE

	Social		Recreation	
Grades	Experimental	Control	Experimental	Control
Kindergarten	+0.13	+0.26	+0.16	+0.30
First Grade	+0.17	-0.29	+0.17	-0.03
Second Grade	+0.11	+0.08	+0.15	-0.14
Third Grade	+0.03	+0.01	+0.01	-0.19
Fourth Grade	-0.37	0.00	-0.11	-0.32

PRETEST AND UNADJUSTED POSTTEST MEANS FOR COGNITIVE INSTRUMENT

BY GROUP BY GRADE

Grades	Awareness of Own Feelings[1]				Awareness of Choice[2]			
	Experimental		Control		Experimental		Control	
	N Pre	Post	N Pre	Post	N Pre	Post	N Pre	Post
Kindergarten	(22) 6.67	6.99	(18) 6.77	7.20	(22) 8.27	8.63	(18) 8.53	8.87
First Grade	(39) 7.28	7.70	(30) 7.44	7.77	(39) 8.99	9.13	(30) 9.04	9.38
Second Grade	(34) 7.60	8.04	(29) 7.69	8.00	(34) 8.99	9.77	(29) 9.16	9.45
Third Grade	(35) 7.71	7.91	(29) 7.84	8.03	(35) 9.36	9.63	(29) 9.42	9.70
Fourth Grade	(35) 8.00	8.18	(31) 7.19	8.06	(35) 9.84	10.05	(31) 9.59	9.91

[1]Range: 3-9
[2]Range: 4-12

PRETEST AND UNADJUSTED POSTTEST MEANS FOR COGNITIVE INSTRUMENT

BY GRADE BY GROUP

	Overcoming Perceived Expectations[3]				Developing Realistic Goals[4]			
	Experimental			Control	Experimental		Control	
Grades	N Pre	Post	N Pre	Post	N Pre	Post	N Pre	Post
Kindergarten	(22) 6.34	6.68	(18) 6.55	6.94	(22) 7.11	7.33	(18) 6.97	7.34
First Grade	(39) 6.85	7.06	(30) 6.84	7.22	(39) 7.46	7.32	(30) 7.38	7.53
Second Grade	(34) 6.85	7.35	(29) 6.95	7.21	(34) 7.33	7.63	(29) 7.50	7.57
Third Grade	(35) 6.93	7.33	(29) 6.92	7.24	(35) 7.48	7.51	(29) 7.31	7.43
Fourth Grade	(35) 7.31	7.35	(31) 7.19	7.22	(35) 7.42	7.53	(31) 7.28	7.29

[3]Range: 3-9
[4]Range: 3-9

DIFFERENCES BETWEEN PRETEST AND UNADJUSTED POSTTEST MEANS

FOR COGNITIVE INSTRUMENT

BY GROUP BY GRADE

	Awareness of Own Feelings		Awareness of Choice	
Grades	Experimental	Control	Experimental	Control
Kindergarten	+0.32	+0.43	+0.36	+0.34
First Grade	+0.42	+0.33	+0.14	+0.34
Second Grade	+0.44	+0.31	+0.78	+0.29
Third Grade	+0.20	+0.19	+0.27	+0.28
Fourth Grade	+0.18	+0.87	+0.21	+0.32

DIFFERENCES BETWEEN PRETEST AND UNADJUSTED POSTTEST MEANS

FOR COGNITIVE INSTRUMENT

BY GROUP BY GRADE

	Overcoming Perceived Expectations		Developing Realistic Goals	
Grades	Experimental	Control	Experimental	Control
Kindergarten	+0.34	+0.39	+0.22	+0.37
First Grade	+0.21	+0.38	-0.14	-0.15
Second Grade	+0.50	+0.26	+0.30	+0.07
Third Grade	+0.40	+0.32	+0.03	+0.12
Fourth Grade	+0.04	+0.03	+0.11	+0.01

PRETEST AND UNADJUSTED POSTTEST MEANS FOR COGNITIVE INSTRUMENT

BY GRADE BY GROUP

	Utilizing Strengths[5]						Dealing with Change[6]					
	Experimental			Control			Experimental			Control		
Grades	N	Pre	Post	N	Pre	Post	N	Pre	Post	N	Pre	Post
Kindergarten	(22)	8.46	8.90	(18)	8.43	9.03	(22)	6.29	6.49	(18)	6.57	7.05
First Grade	(39)	9.49	9.64	(30)	9.31	9.75	(39)	7.09	7.45	(30)	7.02	7.38
Second Grade	(34)	9.77	10.33	(29)	9.80	10.19	(34)	7.26	7.68	(29)	7.27	7.53
Third Grade	(35)	9.64	10.32	(29)	10.05	10.42	(35)	7.45	7.67	(29)	7.43	7.73
Fourth Grade	(35)	10.29	10.46	(31)	10.27	10.32	(35)	7.76	7.97	(31)	7.62	7.68

[5]Range: 4-12
[6]Range: 3-9

PRETEST AND UNADJUSTED POSTTEST MEANS FOR COGNITIVE INSTRUMENT

BY GRADE BY GROUP

	Risking to Help Others[7]						School/Community[8]					
	Experimental			Control			Experimental			Control		
Grades	N	Pre	Post	N	Pre	Post	N	Pre	Post	N	Pre	Post
Kindergarten	(22)	9.55	9.58	(18)	9.50	10.01	(22)	6.60	6.88	(18)	6.55	7.02
First Grade	(39)	10.14	10.33	(30)	10.17	10.37	(39)	6.76	7.21	(30)	6.47	6.95
Second Grade	(34)	10.18	10.55	(29)	10.41	10.41	(34)	6.77	7.51	(29)	6.86	7.03
Third Grade	(35)	10.47	10.66	(29)	10.31	10.51	(35)	6.91	7.51	(29)	6.51	6.96
Fourth Grade	(35)	10.81	10.78	(31)	10.57	10.54	(35)	7.17	7.55	(31)	6.81	7.04

[7]Range: 4-12
[8]Range: 3-9

DIFFERENCES BETWEEN PRETEST AND UNADJUSTED POSTTEST MEANS

FOR COGNITIVE INSTRUMENT

BY GROUP BY GRADE

	Utilizing Strengths		Dealing with Change	
Grades	Experimental	Control	Experimental	Control
Kindergarten	+0.44	+0.60	+0.20	+0.48
First Grade	+0.15	+0.44	+0.36	+0.36
Second Grade	+0.56	+0.39	+0.42	+0.26
Third Grade	+0.68	+0.37	+0.22	+0.30
Fourth Grade	+0.17	+0.05	+0.21	+0.06

DIFFERENCES BETWEEN PRETEST AND UNADJUSTED POSTTEST MEANS

FOR COGNITIVE INSTRUMENT

BY GROUP BY GRADE

	Risking to Help Others		School/Community	
Grades	Experimental	Control	Experimental	Control
Kindergarten	+0.03	+0.51	+0.28	+0.47
First Grade	+0.19	+0.20	+0.45	+0.48
Second Grade	+0.37	0.00	+0.74	+0.17
Third Grade	+0.19	+0.20	+0.60	+0.45
Fourth Grade	-0.03	-0.03	+0.38	+0.23

OVERALL

COGNITIVE

	Experimental[1]		Control[1]	
	Pre	Post	Pre	Post
Kindergarten	59.42	61.32	59.84	63.58
First Grade	64.05	65.92	63.78	66.62
Second Grade	64.82	68.87	65.81	67.50
Third Grade	66.34	68.79	66.12	67.85
Fourth Grade	68.61	69.98	67.38	67.96

	Experimental	Control
Kindergarten	+1.90	+3.74
First Grade	+1.87	+2.84
Second Grade	+4.05	+1.69
Third Grade	+2.45	+1.73
Fourth Grade	+1.37	+0.58

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